U.S. Serial No. 10/581,622 Response to Office Action dated November 12, 2009

Page 2 of 6

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the

application:

1. (Cancelled)

2. (Currently amended) A structure, as claimed in Claim 4 3, wherein the

structure is a flat ring having a circumference and wherein the grains are oriented in a

substantially radial direction around the circumference of the ring.

3. (Currently amended) A structure, as claimed in Claim 1, A structure formed by

chemical vapor deposition, being a planar article having a planar direction and a normal

direction, wherein the structure has a dimension in the planar direction that is larger than the

dimension in the normal dimension and having grains substantially oriented in the planar

direction, wherein the structure comprises silicon carbide.

4. (Currently amended) A structure, as claimed in Claim 1, A structure formed by

chemical vapor deposition, being a planar article having a planar direction and a normal

direction, wherein the structure has a dimension in the planar direction that is larger than the

dimension in the normal dimension and having grains substantially oriented in the planar

direction, wherein the structure is a ring that comprises an inner diameter and an outer

U.S. Serial No. 10/581,622 Response to Office Action dated November 12, 2009

Page 3 of 6

diameter and wherein the distance between the inner diameter and outer diameter is

approximately 25mm (one inch).

5. (Original) A structure, as claimed in Claim 4, wherein the inner diameter is

between about 100 mm to 600 mm in diameter.

6. (Currently amended) A structure, as claimed in Claim 4 3, having an axial

thickness of less than 5 mm (0.2 inches) and a diameter of up to 356 mm (fourteen inches).

7. (Currently amended) A structure, as claimed in Claim 4 3, wherein the

structure is a flat ring that has a curved outer surface.

8. (Currently amended) A structure, as claimed in Claim 4 3, wherein the

structure is a flat ring having a circumference that has substantially symmetrical stresses

around the circumference of the ring.

9. (Currently amended) A structure, as claimed in Claim 4 3, in which the

structure comprises CVD deposited silicon carbide comprising an opacifying dopant

dispersed in the silicon carbide in an amount sufficient to provide an opacity greater than

10,000 times that of CVD-deposited silicon carbide.

U.S. Serial No. 10/581,622 Response to Office Action dated November 12, 2009

Page 4 of 6

10. (Original) A structure, as claimed in Claim 9, in which the dopant is nitrogen

in an amount 100 ppm to about 5000 ppm.

11. (Currently amended) A structure, as claimed in Claim 4 3, in which the

structure comprises CVD deposited silicon carbide material comprising FCC Moissanite-3C

silicon carbide having a peak ratio of 220 planes to 111 planes ranging between about 0.30

and about 1.25, as measured by x-ray diffraction.

12. (Previously Presented) A structure, as claimed in Claim 11, in which the peak

ratio ranges between about 0.33 and about 0.60.

13. (Currently amended) A structure, as claimed in Claim 4 3, in which the

structure comprises CVD deposited silicon carbide material comprising grains having their

axes of growth substantially parallel to each other, and having rotational orientation that is

substantially random with respect to the axes of grain growth of the grains.

14. (Currently amended) A structure, as claimed in Claim 4 3, in which the

structure comprises silicon carbide and further comprises a layer of silicon deposited on at

least one surface thereof.

15.-30. (Cancelled)

U.S. Serial No. 10/581,622 Response to Office Action dated November 12, 2009 Page 5 of 6

31. (Cancelled)

(Currently amended) The structure of claim 34 33, wherein the structure is a
flat ring having a circumference and wherein the grains are oriented in a substantially radial

direction around the circumference of the ring.

33. (Currently amended) The structure of Claim 31, A structure formed by chemical vapor deposition, being a planar article having a planar direction and a normal direction, wherein the structure has a dimension in the planar direction that is larger than the dimension in the normal dimension, wherein the structure is cut from a CVD-formed tube of material such that it has grains substantially oriented in the planar direction of the article, wherein the structure comprises silicon carbide.